

WHAT IS CLAIMED IS:

1. A display system comprising:

a projector mounted inside a vehicle for emitting a light  
5 beam generated based on an image signal toward an opening formed  
at a portion near a rear end of the vehicle;

an exterior screen extendable toward the opening and  
made of a material having low stiffness for displaying an image  
by allowing the light beam emitted by the projector to pass  
10 therethrough while being extended toward the opening; and

a housing unit mounted on or near one of a rear hatch  
and a back door of the vehicle for accommodating the exterior screen.

2. The display system according to claim 1, further  
15 comprising

a loudspeaker mounted on the housing unit for outputting  
sound based on an input sound signal.

3. The display system according to claim 2, further  
20 comprising

an orientation setting mechanism for setting an  
orientation of the loudspeaker toward either one of the inside  
of the vehicle and the outside of the vehicle.

25 4. The display system according to claim 1, further

comprising:

a fixing member mounted on a portion near an end of the exterior screen for removably fixing the exterior screen near either one of the opening and ground; and

5 an elastic member for providing the exterior screen with tension from an end of the exterior screen toward the housing unit.

5. The display system according to claim 1, wherein the projector is mounted at a mounting position on one  
10 of a ceiling of the vehicle and a back surface of a rear seat included in the vehicle.

6. The display system according to claim 5, wherein the projector emits the light beam toward the exterior  
15 screen while a back rest of the rear seat is tilted toward the front of the vehicle.

7. The display system according to claim 5, further comprising  
20 a reflecting member for reflecting the light beam emitted from the projector toward the exterior screen.

8. The display system according to claim 7, wherein the reflecting member is mounted between two front seats  
25 in the vehicle, and

the projector emits the light beam while a back rest of the rear seat is tilted.

9. The display system according to claim 5, further  
5 comprising

a reflecting member for reflecting the light beam emitted from the projector toward the exterior screen, wherein

the projector emits the light beam from the mounting position on the back surface of the rear seat toward the reflecting  
10 member.

10. The display system according to claim 5, wherein when a back rest of the rear seat is tilted, the projector changes a direction of emitting the light beam.

15 11. The display system according to claim 9, wherein when a back rest of the rear seat is not tilted, the projector emits the light beam from the mounting position on the back surface of the rear seat toward the reflecting member

20 12. The display system according to claim 1, further comprising

at least one interior screen mounted near a front seat of the vehicle, wherein

25 the projector is mounted to a rear seat of the vehicle

and, emits the light beam toward either one of the exterior screen and the interior screen depending on a state of the rear seat, and

either one of the exterior screen and the interior screen  
5 which the light beam enters diffuses the light beam reflected by the reflecting member for displaying the image.

13. The display system according to claim 1, further comprising:

10 at least one interior screen mounted near a front seat of the vehicle; and

a reflecting member for reflecting the light beam emitted by the projector toward either one of the exterior screen and the interior screen, wherein

15 either one of the exterior screen and the interior screen which the light beam enters diffuses the light beam reflected by the reflecting member for displaying the image.

14. The display system according to claim 1, further  
20 comprising:

at least interior screen mounted near a front seat of the vehicle for displaying an image by reflecting the light beam emitted by the projector; and

a reflecting member mounted on a rear surface of the  
25 interior screen for reflecting the light beam emitted by the

projector toward the interior screen while the interior screen is changed in position.

15. The display system according to claim 1, further  
5 comprising

a reflecting member mounted near a front seat of the vehicle for reflecting the light beam emitted by the projector toward the exterior screen; and

at least one interior screen which is mounted on a rear  
10 surface of the reflecting member and reflects the light beam emitted by the projector for displaying an image while the reflecting member is changed in position.

16. A display system comprising:

15 a projector mounted inside a vehicle for emitting a light beam generated based on an image signal;

a screen for displaying an image by allowing the light beam emitted by the projector to pass therethrough or reflecting the light beam; and

20 a light shield having a surface which forms a predetermined angle with respect to the screen.

17. A display system comprising:

a projector mounted inside a vehicle for emitting a light  
25 beam generated based on an image signal;

a screen mounted inside the vehicle for displaying an image by reflecting the light beam emitted by the projector;

a supporting member for rotatably supporting the screen;

a reflecting member mounted inside the vehicle for  
5 reflecting the light beam reflected by the screen toward a rear seat of the vehicle; and

a detector for detecting a rotation angle of the screen,  
wherein

the projector includes:

10 an image deforming unit for deforming the image based on the rotation angle detected by the detector and a position of the screen; and

an optical system for generating a light beam based on the image deformed by the image deforming unit and emitting  
15 the light beam.